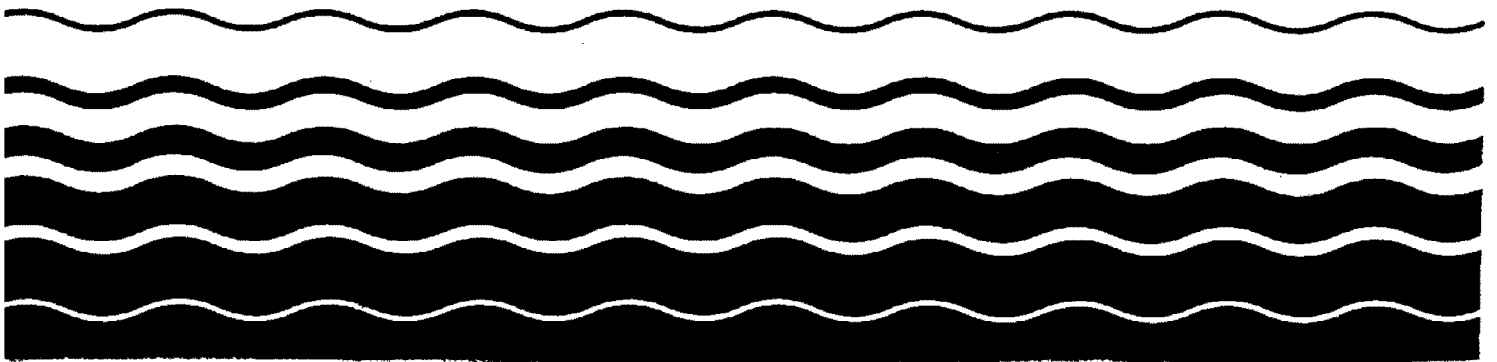




Water

Turbidity

Water Quality Standards Criteria Summaries: A Compilation of State/Federal Criteria



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surface waters. Turbidity in State
water quality standards is the subject of this compilation.

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The reader should consult the water quality standards of a particular State for exact regulatory language applicable to that State. Copies of State water quality standards may be obtained from the State's Water Pollution Control Agency or its equivalent.

Additional information may also be obtained from the:

Standards Branch
Criteria and Standards Division (WH-585)
Office of Water Regulations and Standards
U.S. Environmental Protection Agency
Washington, D.C. 20460
202-475-7315

INTRODUCTION

This digest is compiled to provide general information to the public as well as to Federal, State, and local officials. It contains excerpts from the individual Federal-State water quality standards establishing pollutant specific criteria for interstate surface waters. The water quality standards program is implemented by the U. S. Environmental Protection Agency where responsibility for providing water quality recommendations, approving State-adopted standards for interstate waters, evaluating adherence to the standards, and overseeing enforcement of standards compliance, has been mandated by Congress.

Standards, a nationwide strategy for surface water quality management, contain three major elements: the use (recreation, drinking water, fish and wildlife propagation, industrial, or agricultural) to be made of the navigable water; criteria to protect these uses; and an antidegradation statement to protect existing high quality waters, from degradation by the addition of pollutants. Guidance for the development of standards by individual States is contained in two EPA documents entitled Water Quality Standards Handbook (1983) and Quality Criteria for Water (1986).

Criteria for Turbidity in State water quality standards are the subject of this digest. The term turbidity is usually used in conjunction with the term "suspended and settleable solids" which is descriptive of the organic and inorganic particulate matter in water. Both are important parameters in municipal and industrial water supply and treatment technology. Besides producing undesirable recreational waters, other effects resulting from turbid waters or water having high suspended solids concentrations include reducing available food for fish, impeding fish migration and other natural fish movements, preventing the development of fish eggs and insect larvae, and decreasing the fishes resistance to disease. The 1986 Quality Criteria for Water recommends the following criterion which will prevent the deterioration of water quality and aquatic life.

Freshwater fish and other aquatic life:

Settleable and suspended solids should not reduce the depth of the compensation point for photosynthetic activity by more than 10 percent from the seasonally established norm for aquatic life.

Since water quality standards experience revisions and upgrading from time to time, following procedures set forth in the Clean Water Act, individual entries in this digest may be superseded. As these revisions are accomplished and allowing for the States to revise their standards accordingly, this digest will be updated and reissued. Because this publication is not intended for use other than as a general information resource, to obtain the latest information and for special purposes and applications, the reader needs to refer to the current approved water quality standards. These can be obtained from the State water pollution control agencies or the EPA or Regional Offices.

REFERENCES

- 3 Water Quality Boundaries and Standards (Arizona), Article 2. Surface Water Quality Standards, A.R.S R18.11, 1987.
- 5 California Water Quality Standards by River Basins, ca. 1975.
- 11 Hawaii Administrative Rules, Title II, Hawaii Department of Health, Chapter 54: Water Quality Standards, 1988.
- 12 Idaho Department of Health and Welfare Rules and Regulations, Title 1, Chapter 2, "Water Quality Standards and Wastewater Treatment Requirements", 1980.
- 43 Texas Surface Water Quality Standards, Texas Water Commission, Rule Change, 1988.
- 44 Utah Standards of Quality for Waters of the State, Wastewater Disposal Regulations: Part II, State of Utah Department of Health: Division of Environmental Health, 1988.
- 45 Vermont Water Quality Standards, State of Vermont Water Resource Board, 1987.
- 48 Water Quality Standards, West Virginia Legislative Rules, State Water Resources Board, 1985.
- 51 Water Quality Standards for American Samoa, 1984, pp. 20,22,24,25.
- 53 Revised Guam Water Quality Standards, Guam Environmental Protection Agency, 1984, pp. 10,11.
- 54 Commonwealth of the Northern Mariana Islands Marine and Fresh Water Quality Standards, Commonwealth Register, Vol. 8., No. 5, 1986, p.4465.
- 56 Marine and Fresh Water Quality Standard Regulations, Trust Territory, 1986, p. 7.
- 57 Environmental Laws and Regulations of the Virgin Islands, 1985.

ENVIRONMENT REPORTER, The Bureau of National Affairs, Inc. Washington, D.C.
20037

- 1 Pages 701:1003-1010, September 5, 1980
- 2 Pages 706:1003-1008, November 7, 1986
- 4 Page 716-1004, August 30, 1985
- 6 Page 726:1009, August 22, 1986
- 7 Pages 731:1004-1008, May 14, 1982

8 Pages 736:1007-1010, March 28, 1986
9 Page 746:1010.2, September 5, 1986
14 Pages 771:1016-1019, January 10, 1986
15 Page 776:1005, February 13, 1987
16 Page 781:1011, March 27, 1987
18 Page 791:1006, January 18, 1985
20 Page 801:1002, April 19, 1985
21 Pages 806:1002-1003, June 21, 1985
22 Page 811:1003, February 13, 1987
23 Pages 816:1005-1008, June 25, 1982
26 Pages 831:1004-1009, April 19, 1985
28 Pages 841:1014-1073, June 29, 1984
29 Page 846:1005, October 5, 1984
30 Page 851:1020, April 11, 1986
31 Page 856:1002, June 11, 1982
32 Pages 861:1007-1012, November 29, 1985
33 Page 866:1009, August 29, 1986
36 Pages 881:1008-1009, September 26, 1986
37 Page 886:1010, May 9, 1986
38 Page 891:1008, August 9, 1985
39 Pages 901:1002-1004, August 9, 1984
40 Pages 906:1006-1007, November 29, 1985
42 Pages 916:0541-0543, September 7, 1984
47 Pages 941:1003-1005, October 21, 1983
50 Page 956:1005, July 5, 1985
55 Pages 896:1003-1004, December 23, 1983

State

Designated Use and Criteria Values

Alabama¹

Public Water Supply. There shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters, without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

The following uses require the same turbidity criteria as described above:

Swimming and Other Whole Body Water-Contact Sports

Shellfish Harvesting

Fish and Wildlife

Agricultural and Industrial Water Supply

Industrial Operations

Navigation

Alaska²

FRESH WATER USES:

Water for Drinking, Culinary, and Food Processing. Shall not exceed 5 NTU above natural conditions when the natural turbidity is 50 NTU or less, and not have more than 10% increase in turbidity when the natural condition is more than 50 NTU, not to exceed a maximum increase of 25 NTU.

Agriculture, Including Irrigation, and Stock Watering. Shall not cause detrimental effects on indicated use.

Aquaculture. Shall not exceed 25 NTU above natural condition level. For all lake waters, shall not exceed 5 NTU over natural conditions.

Industrial, including any water supplies used in association with a manufacturing or production enterprise (other than food processing), including mining energy production or development. Shall not cause detrimental effects on established water supply treatment levels.

Contact Recreation. Shall not exceed 5 NTU above natural conditions when the natural turbidity is 50

State

Designated Use and Criteria Values

NTU or less, and not have more than 10% increase in turbidity when the natural condition is more than 50 NTU, not to exceed a maximum increase of 15 NTU. Shall not exceed 5 NTU over natural conditions for lake waters.

Secondary Contact Recreation. Shall not exceed 5 NTU above natural conditions when natural turbidity is 50 NTU or less, and not have more than 20% increase in turbidity when the natural condition is more than 50 NTU, not to exceed a maximum increase of 50 NTU. For all lake waters turbidity shall not exceed 5 NTU over natural conditions.

Growth and Propagation of Fish, Shellfish and Other Aquatic Life, Including Waterfowl and Furbearers. Shall not exceed 25 NTU above natural condition level. For all lake waters, shall not exceed 5 NTU over natural conditions.

MARINE WATER USES:

Aquaculture. Shall not exceed 25 NTU.

Seafood Processing. Shall not interfere with disinfection.

Industrial, including any water supplies used in association with a manufacturing or production enterprise (other than food processing), including mining, placer mining, energy production or development. Shall not cause detrimental effects on established levels of water supply treatment.

Contact Recreation. Shall not exceed 25 NTU.

Secondary Contact Recreation. Shall not exceed 25 NTU.

Growth and Propagation of Fish, Shellfish, Aquatic Life, and Wildlife Including Seabirds, Waterfowl and Furbearers. Shall not reduce the depth of the compensation point for photosynthetic activity by more than 10%. In addition, shall not reduce the maximum secchi disk depth by more than 10%.

Harvesting for Consumption of Raw Mollusks or Other Raw Aquatic Life. Same as above.

State

Designated Use and Criteria Values

Arizona³

Drinking Water Source. No standard for streams or lakes.

Full Body Contact and Incidental Human Contact. No person shall cause the turbidity to exceed 50 NTU in streams, or 25 NTU in lakes.

Aquatic and Wildlife. No person shall cause the turbidity to exceed 50 NTU in streams, or 25 NTU in lakes.

Aquatic and Wildlife in a Coldwater Fishery. No person shall cause the turbidity to exceed 10 NTU in streams or lakes.

Agricultural Irrigation and Livestock Watering. No standard for streams or lakes.

Unique Waters. Turbidity changes due to man 3 NTU.

Arkansas⁴

There shall be no distinctly visible increase in turbidity of receiving waters attributable to municipal, industrial, agricultural, other waste discharges or instream activities.

Specific turbidity criteria are ecoregion specific.

California⁵

All Waters - Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Increase in turbidity attributable to controllable water quality factors shall not exceed the following limits:

1. Where natural turbidity is between 0 and 50 JTU, increases shall not exceed 20 percent.
2. Where natural turbidity is between 50 and 100 JTU, increases shall not exceed 10 JTU.
3. Where natural turbidity is greater than 100 JTU, increases shall not exceed 10 percent.

Allowable zones of dilution within which higher concentrations will be tolerated will be defined for each discharge in discharge permits.

Ocean Waters - Limiting concentrations are:

75 JTU Monthly (30 day average)
100 JTU Weekly (7 day average)

State

Designated Use and Criteria Values

225 JTU Maximum at any time

Colorado⁶

The Commission recognizes that excessive salinity and suspended solids levels can be detrimental to the water use classifications. The Commission has established salinity standards for the Colorado River basin ("Water Quality Standards for Salinity including Numeric Criteria and Plan of Implementation for Salinity Control", Commission Regulation 3.9) but has not established or assigned other standards for salinity or suspended solids. This section is reserved for additional salinity and suspended solids control practices to be developed through 208 plans, coordination with agricultural agencies, and further studies of existing water quality.

Connecticut⁷

INLAND WATERS

Class AA. Turbidity shall not exceed 10 JTU over ambient levels. A secchi disc shall be visible at a minimum depth of 1 meter. All reasonable controls are to be used.

Class A. Same as above.

Class B. Turbidity shall not exceed 25 JTU, Bc 10 JTU; Bc not to exceed 10 JTU over ambient levels. A secchi disc shall be visible at a minimum depth of 1 meter, Class Bb-criteria may be exceeded. (see Note 14)

Class C. Turbidity shall not exceed 25 JTU.

Class D. Not specified.

COASTAL AND MARINE WATERS

Class SA. None other than of natural origin except as may result from normal agricultural, road maintenance, construction activity or dredge material disposal provided all reasonable controls are used. A secchi disc shall be visible at a minimum depth of 1 meter, SAb -- criteria may be exceeded. (see Note 6)

Class SB. A secchi disc shall be visible at a minimum of 1 meter, SBb -- criteria may be exceeded. (see Note 6)

Class SC. None in such concentrations that would impair any usages specifically assigned to this class.

Class SD. Not specified.

State

Designated Use and Criteria Values

GROUNDWATERS

All Classes. None other than natural origin.

Note 14. The use of subscript b in Class Sb is intended to identify those areas where natural conditions or conditions which cannot be expected to be appreciably altered by the control of discharges may preclude bathing. It may also be used in Classes Bb and SBb to designate areas in the immediate vicinity of treated sewage outfalls where bathing is not advisable.

Delaware⁸

All. Shall not exceed natural levels by more than 10 Nephelometric or Formazin Turbidity units.

Florida⁹

All. Shall not exceed 29 NTU's above natural background.

Georgia¹⁰

Not specified

Hawaii¹¹

Criteria for Streams.

Wet Season¹

Geometric mean not to exceed 5.0 NTU.

Not to exceed 15.0 NTU more than 10% of the time.

Not to exceed 25.0 NTU more than 2% of the time.

Dry Season²

Geometric mean not to exceed 2.0 NTU.

Not to exceed 5.5 NTU more than 10% of the time.

Not to exceed 10.0 NTU more than 2% of the time.

Criteria for Estuaries Except Pearl Harbor.

Geometric mean not to exceed 1.50 NTU.

Not to exceed 3.00 NTU more than 10% of the time.

Not to exceed 5.00 NTU more than 2% of the time.

Criteria for Pearl Harbor.

Geometric mean not to exceed 4.00 NTU.

Not to exceed 8.00 NTU more than 10% of the time.

Not to exceed 15.00 NTU more than 2% of the time.

Criteria for Embayments.

Wet Criteria³

Geometric mean not to exceed 1.50 NTU.

Not to exceed 3.0 NTU more than 10% of the time.

Not to exceed 5.0 NTU more than 2% of the time.

State

Designated Use and Criteria Values

Dry Criteria⁴

- Geometric mean not to exceed 0.40 NTU.
- Not to exceed 1.00 NTU more than 10% of the time.
- Not to exceed 1.50 NTU more than 2% of the time.

Criteria for Open Coastal Waters.

Wet Criteria⁵

- Geometric mean not to exceed 0.50 NTU.
- Not to exceed 1.25 NTU more than 10% of the time.
- Not to exceed 2.00 NTU more than 2% of the time.

Dry Criteria⁶

- Geometric mean not to exceed 0.20 NTU.
- Not to exceed 0.50 NTU more than 10% of the time.
- Not to exceed 1.00 NTU more than 2% of the time.

Criteria for Oceanic Waters.

- Geometric mean not to exceed 0.03 NTU.
- Not to exceed 0.10 NTU more than 10% of the time.
- Not to exceed 0.20 NTU more than 2% of the time.

- 1 November 1 through April 30.
- 2 May 1 through October 31.
- 3 "Wet" criteria apply when the average fresh water inflow from the land equals or exceeds 1% of the embayment volume per day.
- 4 "Dry" criteria apply when the average fresh water inflow from the land is less than 1% of the embayment volume per day.
- 5 "Wet" criteria apply when the open coastal waters receive more than three million gallons per day of fresh water discharge per shoreline mile.
- 6 "Dry" criteria apply when the open coastal waters receive less than three million gallons per day of fresh water discharge per shoreline mile.

Idaho¹²

The wastewater must not increase the turbidity of the receiving water outside the mixing zone by:

1. More than five (5) NTU over background turbidity, when background turbidity is fifty (50) NTU or less;
2. More than ten percent (10%) increase in turbidity when background turbidity is more than fifty (50) NTU, not to exceed a maximum increase of twenty-five (25) NTU.

State

Designated Use and Criteria Values

Illinois¹³

Not specified

Indiana¹⁴

Natural spawning areas or rearing or imprinting areas for salmonid fishes. No material from other than natural causes shall be added which will cause the turbidity of the water to exceed 10 Jackson turbidity units. (JTU)

Migration routes for salmonid fishes. No material from other than natural causes shall be added which will cause the turbidity of the water to exceed 25 JTU.

Iowa¹⁵

All stream uses. The turbidity of the receiving water shall not be increased by more than 25 NTU by any point source discharge.

Kansas¹⁶

There shall be no increase, of other than natural origin, in the turbidity of waters of the state, that will cause substantial visible contrast with the natural appearance of the water.

Kentucky¹⁷

Not specified

Louisiana¹⁸

All. Turbidity other than that of natural origin shall not cause substantial visual contrast with the natural appearance of the waters of the state or impair any designated water use. Turbidity shall not significantly exceed background where background is defined as the natural condition of the water. Determination of background will be on a case-by-case basis.

As a guideline, maximum turbidity levels, expressed as NTU, are established and shall apply for the following named waterbodies and major aquatic habitat types of the state:

(1) Red, Mermentau, Atchafalaya, Mississippi, and Vermilion Rivers and Bayou Teche: 150 NTU.

(2) Estuarine lakes, bays, bayous and canals: 50 NTU.

(3) Amite, Pearl, Puachita, Sabine, Calcasieu, Tangipahoa, Tickfaw and Tchefuncte Rivers: 50 NTU.

(4) Freshwater lakes, reservoirs and oxbows: 25 NTU.

(5) Designated scenic streams and outstanding natural resource waters: 25 NTU.

State

Designated Use and Criteria Values

(6) For other state waters not included in 1-5 above, and in stream segments where natural background turbidity exceeds the values in 1-5 above, turbidity in NTU caused by any point source discharge shall be restricted to the appropriate background value plus 10 percent.

The administrative authority may determine to exempt certain activities for short periods of time which are permitted under Sections 402 or 404 or certified under Section 401 of the Clean Water Act such as maintenance dredging of navigable waterways or other short-term activities determined by the state as necessary to accommodate legitimate uses or emergencies or to protect the public health and welfare.

Maine¹⁹

Not specified

Maryland²⁰

All.

(i) Turbidity may not exceed levels detrimental to aquatic life.

(ii) Turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average. Units may be measured in Nephelometer Turbidity Units, Formazin Turbidity Units or Jackson Turbidity Units.

Massachusetts²¹

Class A. None other than of natural origin.

All. Shall not be in concentrations or combinations that would exceed the recommended limits on the most sensitive receiving water use.

Michigan²²

All. The waters of the state shall not have any of the following unnatural physical properties in quantities which are or may become injurious to any designated use:

- (1) Turbidity.
- (2) Color.
- (3) Oil films.
- (4) Floating solids.
- (5) Foams.
- (6) Settleable solids.
- (7) Suspended solids.
- (8) Deposits.

State

Designated Use and Criteria Values

Minnesota²³

Domestic consumption.

Class A -- 5

Class B -- 5

Class C -- 25

Fisheries and recreation.

Class A -- 10

Class B -- 25

Class C -- 25

Industrial consumption.

Class A -- 5

Mississippi²⁴

Not specified

Missouri²⁵

Not specified

Montana²⁶

A-1 Classification. No increase above naturally occurring turbidity is allowed except as permitted in ARM 16.20.633.

B-1, C-1 Classifications. The maximum allowable increase above naturally occurring turbidity is 5 NTU except as permitted in ARM 16.20.633.

B-2, B-3, C-2, C-3 Classifications. The maximum allowable increase above naturally occurring turbidity is 10 NTU except as permitted in ARM 16.20.633.

E Classification. No increase in naturally occurring turbidity is allowed which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

Nebraska²⁷

Not specified

Nevada²⁸

Variable. No turbidity which will adversely affect the beneficial uses of the water; i.e., not to exceed 10 NTU for cold water fishery (salmonids) and 50 NTU for warm water fishery (other than salmonids).

Turbidity shall not exceed that characteristic of natural conditions by more than 10 Jackson Units.

See Nevada State Water Quality Criteria Compilation 1979, for specific stretches of streams.

State

Designated Use and Criteria Values

New Hampshire²⁹

Class A. Not to exceed 5 standard turbidity units unless naturally occurring.

Class B. Not to exceed 10 standard turbidity units in cold water fisheries. Not to exceed 25 standard turbidity units in warm water fisheries unless naturally occurring.

Class C. Same as Class B.

New Jersey³⁰

Classes FW2, SE3. Maximum 30-day average of 15 NTU, a maximum of 50 NTU at any time.

Classes SE1, SE2. Maximum 30-day average of 10 NTU, a maximum of 30 NTU at any time.

Classes SC. Levels shall not exceed 10.0 NTU.

New Mexico³¹

All. Turbidity attributable to other than natural causes shall not reduce light transmission to the point that desirable aquatic life presently common in New Mexico waters is inhibited or that will cause substantial visible contrast with the natural appearance of the water. Turbidity attributable to natural causes or the reasonable operation of irrigation and flood control facilities is not subject to these standards.

New York³²

All. No increase except from natural sources that will cause a substantial visible contrast to natural conditions. In cases of naturally turbid waters, the contrast will be due to increased turbidity.

North Carolina³³

All. The turbidity in the receiving water due to a discharge shall not exceed 50 NTU in streams not designated as trout waters and 10 NTU in streams, lakes or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU due to discharge; if turbidity exceeds these levels due to natural background conditions, the discharge level cannot cause any increase in turbidity in the receiving water.

North Dakota³⁴

Not specified

State

Designated Use and Criteria Values

Ohio³⁵

Not specified

Oklahoma³⁶

All stream uses. Turbidity from other than natural sources shall be restricted to not exceed the following numerical limits:

Warm Water Streams.....50 NTU.

Warm Water Lakes.....25 NTU.

Cold Water Streams.....10 NTU.

In waters where background turbidity exceeds these values, turbidity from point sources shall be restricted to not exceed ambient levels. Unless due to purely natural or non-man induced conditions, the turbidity levels may reasonably be expected to decrease as management of man-induced nonpoint sources occurs.

Numerical criteria listed above apply only to normal stream flow conditions. Elevated turbidity levels may be expected during and for several days after a runoff event.

Oregon³⁷

All. No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(i) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to public health and welfare.

(ii) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85-100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.

Pennsylvania³⁸

All uses:

Tur₁ - Not more than 30 NTU during the period 5/30 to 9/15, nor more than a monthly mean of 40 NTU or a maximum of 150 NTU during the remainder of the year.

State

Designated Use and Criteria Values

Tur₂ - Maximum monthly mean 40 NTU, maximum value not more than 150 NTU.

Tur₃ - Not more than 100 NTU.

Tur₄ - For the period 5/15 to 9/15 of any year, not more than 40 NTU; for the period 9/16 to 5/14 of any year, not more than 100 NTU.

Tur₅ - Maximum monthly mean of 10 NTU, maximum of 150 NTU.

Tur₆ - Maximum monthly mean of 20 NTU, maximum of 150 NTU.

Tur₇ - Maximum monthly mean of 30 NTU, maximum of 150 NTU.

Note: See Drainage Lists A through E of Pennsylvania Water Quality Standards for applicable uses and streams.

Rhode Island³⁹

Fresh Waters:

Class A. None other than of natural origin. Not to exceed 5 Jackson Units (5 JU).

Class B. None in such concentrations that would impair any usages specifically assigned to this Class. Not to exceed 10 JU.

Class C. None in such concentration that would impair any usages specifically assigned to this Class. Not to exceed 15 JU.

Class D. None in such concentrations that would impair any usages specifically assigned to this Class.

Sea Waters:

Class SA. None in such concentrations that would impair any usages specifically assigned to this Class.

Class SB. None in such concentrations that would impair any usages specifically assigned to this class.

Class SC. None in such concentrations that would impair any usages specifically assigned to this class.

State

Designated Use and Criteria Values

South Carolina⁴⁰

Class A-Trout. Not to exceed 10% above natural conditions, provided existing uses are maintained.

Class B-Trout. Same as above.

South Dakota⁴¹

Not specified

Tennessee⁴²

Domestic Water Supply. There shall be no turbidity or color in amounts or characteristics that cannot be reduced to acceptable concentrations by conventional water treatment processes.

Industrial Water Supply. Same as above.

Fish and Aquatic Life. There shall be no turbidity or color in such amounts or of such character that will materially affect fish and aquatic life.

Recreation. There shall be no turbidity or color added in such amounts or character that will result in any objectionable appearance to the water.

Texas⁴³

All. Waste discharges shall not cause substantial and persistent changes from ambient conditions of turbidity or color.

Utah⁴⁴

Classes 2A, 2B, 3A, and 3B. Maximum 10 NTU. At background levels of 100 NTU's or greater, a 10% increase limit will be used instead of the numeric values listed.

Class 3C and 3D. Maximum 15 NTU. At background levels of 150 NTUs or greater, a 10% increase limit will be used instead of the numeric value listed.

Short term variances may be considered on a case-by-case basis.

Vermont⁴⁵

Class A. Public water supply is not to exceed 10 NTU or background conditions, whichever is lower.

Class B and C. Cold water fish habitat waters are not to exceed 10 NTU. Warm water fish habitat waters are not to exceed 25 NTU.

Virginia⁴⁶

Not specified

State

Designated Use and Criteria Values

Washington⁴⁷

Class AA (Extraordinary) and Class A (Excellent). Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

Class B (Good) and Class C (Fair). Turbidity shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

Lake Class. Turbidity shall not exceed 5 NTU over background conditions.

West Virginia⁴⁸

Categories A, B, & C

No point or non-point source to West Virginia's waters shall contribute a net load of suspended matter such that the turbidity exceeds 10 NTU over background turbidity when the background is 50 NTU or less, or have more than a 10 percent increase in turbidity (plus 10 NTU minimum) when the background turbidity is more than 50 NTU.

This limitation shall apply to all earth disturbance activities and shall be determined by measuring stream quality directly above and below the area where drainage from such activity enters the affected stream. Any earth disturbance activity continuously or intermittently carried on by the same or associated persons on the same stream or tributary segment shall be allowed a single net loading increase.

Categories A, B1, B3, & C This regulation shall not apply to those activities at which Best Management Practices in accordance with the State's adopted 208 Water Quality Management Plan are being utilized, maintained and completed on a site specific basis as determined by the appropriate 208 cooperative or an approved Federal or State Surface Mining Permit is in effect. This exemption shall not apply to trout waters.

Wisconsin⁴⁹

Not specified

Wyoming⁵⁰

(a) In all Class I and II waters the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 10 NTU's.

State

Designated Use and Criteria Values

(b) In all Class III waters the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 15 NTU's.

(c) An exceptions to paragraphs (a) and (b) of this section shall apply to the North Platte River from Guernsey Dam to the Nebraska line during the annual "silt run" from Guernsey Dam.

American Samoa⁵¹

All fresh surface waters.

Median turbidity not to exceed 5 NTU.

Not to exceed 8 NTU 10% of the time.

Not to exceed 12 NTU 2% of the time.

Open coastal nearshore waters.

Median turbidity not to exceed .25 NTU.

Not to exceed .35 NTU 10% of the time.

Not to exceed .45 NTU 2 % of the time.

Oceanic waters.

Median turbidity not to exceed .20 NTU.

Not to exceed .29 NTU 10% of the time.

Not to exceed .36 NTU 2% of the time.

Embayments excluding Pago Pago Harbor, Fagatele Bay and Pala Lagoon.

Median turbidity not to exceed .35 NTU.

Not to exceed .45 NTU 10% of the time.

Not to exceed .60 NTU 2% of the time.

For turbidity criteria in specific harbors, refer to Water Quality Standards for American Samoa, p. 21 and 23.

District of Columbia⁵²

Not specified

Guam⁵³

Classes M-1, S-1. Turbidity at any point shall not exceed 3 NTU over ambient conditions except when due to natural conditions.

Classes M-2, M-3, S-2, S-3. Turbidity at any point shall not exceed 5 NTU over ambient conditions except when due to natural conditions.

State

North Mariana⁵⁴
Islands

Designated Use and Criteria Values

Classes AA,1. Turbidity shall not be greater than 2 NTU at any time.

Classes A,2. Turbidity shall not be greater than 5 NTU at any time.

Puerto Rico⁵⁵

Class SA. Shall not be altered except by natural causes.

Class SB. Shall not exceed 10 NTU.

Class SC. Shall not exceed 10 NTU.

Class SD. Shall not exceed 50 NTU, except when due to natural phenomena.

Class SE. Shall not be altered except by natural causes.

Trust Territory⁵⁶

Classes AA, A. Shall not exceed 1 NTU.

Class B. Shall not exceed 2 NTU.

Class 1. Shall not be greater than 5% above natural conditions.

Class 2. Shall not be greater than 10% above natural conditions.

Virgin Islands⁵⁷

Class A. Existing natural conditions shall not be changed.

Class B. 3 NTU

Classes B and C. A secchi disk shall be visible at a minimum depth of one meter.